



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,676	11/21/2000	Bradley J. Bartz	777.346US1	9183

7590 02/18/2004

Steven J Rocci  
Woodcock Washburn Kurtz Mackiewicz & Norris LLP  
One Liberty Place  
46th Floor  
Philadelphia, PA 19103

EXAMINER

VU, TUAN A

ART UNIT	PAPER NUMBER
----------	--------------

2124

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n No.

09/717,676

Applicant(s)

BARTZ ET AL.

Examiner

Tuan A Vu

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date 9.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is responsive to the Applicant's response filed 12/16/2003.

As indicated in Applicant's response, no claims have been amended. Claims 1-38 are pending in the office action.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 3-12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Skinner, USPN: 5,481,722 ( hereinafter Skinner).

**As per claim 3**, Skinner discloses a method useful in developing software having multiple versioned documents, comprising:

defining at least 2 nested types of subdivision in both documents (e.g. *start control line*, *end control line* – Fig. 6; *text line* – Fig. 6 – Note: second subdivision could be line-by-line or character-by-character in a line);

comparing current first-type subdivision of one documents to a counterpart of other document; and indicating differences therebetween ( e.g. *output table* , *branch deltas* – Fig 7a-b; *control line* - col. 7, line 30 to col. 8, line 25 – Note: grouping of lines under limits of control lines reads on first type of subdivision being a section of document);

Art Unit: 2124

comparing current second-type subdivision of one documents to a counterpart of the other document (Fig. 6 – Note: the comparing of lines by lines text is implicitly disclosed); repeating second comparing step within subdivision of first type (e.g. *text lines* - Fig. 6);

repeating first comparing step for further first-type subdivision within the documents ( Fig. 6; *control line* - col. 7, line 30 to col. 8, line 25);

producing an output document indicating differences found in both comparing steps (e.g. *output delta table* - col. 8, lines 16-25; Fig. 5)

**As per claim 4**, as suggested by Skinner, each control line is indicative of a revision/edition level so such control line entails a matched version ( e.g. *unchanged, may be zero* -- col. 7, lines 37-53). Skinner has implicitly disclosed that upon detecting no difference between first-type subdivision, the comparing of second-type subdivision is inhibited.

**As per claims 5 and 6**, Skinner discloses that the first subdivision type is a line(*start control line, end control line* – Fig. 6; *text line* – Fig. 6). But Skinner does not explicitly teach that the second subdivision is a character but since a character matching is inherent to a line comparison, Skinner has implicitly disclosed that the second subdivision type is a line.

**As per claim 7**, this is a computer-readable medium version of claim 3. As for a medium to support the software product, Skinner ( Fig. 3) discloses use of workstations to develop the software building, hence implicitly discloses the use of computer-readable medium.

**As per claim 8**, Skinner discloses a method useful in developing software having multiple versioned documents, comprising:

Art Unit: 2124

defining at least 3 nested types of subdivision in both documents (e.g. *start control line*, *end control line* – Fig. 6; *text line* – Fig. 6 – Note: third subdivision type is the inherent character-by-character type in a line);

comparing current first-type subdivision of one documents to a counterpart of other document; and indicating differences therebetween ( e.g. *output table* , *branch deltas* – Fig 7a-b);

comparing current second-type subdivision of one documents to a counterpart of the other document (Fig. 6 – Note: the comparing of lines by lines text is implicitly disclosed);

comparing current third-type subdivision of one documents to a counterpart of the other document (Fig. 6 – Note: the inherent comparing of character-by-character type in a text line is implicitly disclosed);

repeating third comparing step within subdivision of second type (e.g. character in *text lines* - Fig. 6);

repeating second comparing step within subdivision of first type (e.g. *text lines* between *control lines* -- Fig. 6);

repeating first comparing step for further first-type subdivision within the documents(e.g. *control lines* per block - Fig. 6; col. 7, line 30 to col. 8, line 25);

producing an output document indicating differences found in all comparing steps (e.g. *output delta table* - col. 8, lines 16-25; Fig. 5).

**As per claim 9**, see claim 4 for corresponding rejection.

**As per claim 10**, Skinner discloses a multi-line section enclosed by control lines (e.g. Fig. 6).

Art Unit: 2124

**As per claim 11**, Skinner discloses a method useful in developing software having multiple versioned documents, comprising:

comparing 2 child documents of a common parent document with each other and indicating any differences as actual conflicts between the two (e.g. col. 8, line 55 to col. 9, line 5);

comparing both child documents with a common parent for indicating possible conflicts between child documents for portions therein that are same to each other (e.g. *assign level identification, factoring into consideration, incremental deltas* – col. 9, line 12-52; Fig. 7a-b – Note: taking into consideration a branch delta as a result of multiple historical version branching by the root document based on level identification is equivalent to tracking possible differences between apparently identical siblings coming from a parent file );

producing a merged output document indicating both actual and possible conflicts (e.g. col. 8, 14-27; *combined delta structure file* - Fig. 5 ).

**As per claim 12**, see Skinner, Fig. 7a-b ( re claim 11).

**As per claim 15**, this is a computer-readable medium version of claim 11. As for a medium to support the software product, Skinner ( Fig. 3) discloses use of workstations to develop the software building, hence implicitly discloses the use of computer-readable medium.

4. Claims 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Carrier III et al., USPN: 5,903,897 (hereinafter Carrier).

**As per claim 22**, Carrier discloses a method useful in developing software having multiple versioned documents, comprising:

associating like versions of versioned documents with each other in a change set specification (e.g. list of *released forms* – col. 6, lines 17-52; Fig. 5-6);

associating additional, non-versioned documents into the same change set (e.g. step 328 – Fig. 9; *build log 550, test cases 520, build report 552*– Fig. 12);

retrieving both versioned and nonversioned documents as a single unit (e.g. *source files and check-in info, defect tracker* -Fig. 11; Fig 12).

**As per claim 23**, Carrier discloses listing of versioned documents in an association file ( e.g. *release forms* → *build 170* – Fig. 3).

**As per claim 24**, Carrier discloses associating nonversioned and versioned documents by listing them in a same association file ( e.g. *build report 552* – Fig. 12).

**As per claim 25**, Carrier discloses a build generated separately from the list of approved released forms (e.g. *build 170* - Fig. 3); hence discloses association file separately stored from versioned documents stored in database 403 ( Fig. 11).

**As per claim 26**, this is a computer medium version of claim 22 with the medium limitation being disclosed by Carrier (medium driver 60 – Fig. 1).

5. Claims 27, 29, and 31-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Leblang et al., USPN: 5,649,200 (hereinafter Leblang).

**As per claim 27**, Leblang discloses an association file (*configuration record 532* – Fig. 23; col. 25, lines 30-42) or record for a set of versioned documents, comprising: a plurality of entries each designating a version of the versioned documents (e.g. *derived object 500*- Fig. 22); at least one entry designating a non-versioned document pertaining to at least one versioned documents (e.g. *script/.../foo.c*, - Fig. 22).

**As per claim 29**, Leblang discloses audit or bug report stored in configuration record (e.g. col. 30, line 55 to col. 31, line 10).

**As per claim 31**, Leblang discloses a method useful in developing software having multiple versioned documents, comprising: synchronizing a set of files from a common storage area to a private enlistment area (e.g. Fig. 1, 7, 12, 15; *VOB*, *view: alpha* – Fig. 21 – Note: *VOB* is equivalent to common storage area whereas *view* is enlistment area); adding a set of build-specific changes to the files in the enlistment area; making local changes to the enlisted files (e.g. Fig. 12,16); thereafter removing the changes from the enlisted files and returning enlistment files to the common area (e.g. *reserved checkouts* - Fig. 14a -Note: check-out of files with save of original in version control is equivalent to return the non-modified version back into the common area).

**As per claim 32**, Leblang discloses repeating the enlistment process (e.g. Fig. 7, 19-21).

**As per claim 33**, Leblang discloses an common area for all separate enlistment areas ( e.g. col. 6, lines 4-37 – Note: per host workstation, a *VOB* is a shared area for all enlistments viewed by the user of that workstation, hence common to all separate views).

**As per claim 34**, see Leblang, Fig. 7, Figs 11-16; re claim 1.

**As per claim 35**, Leblang discloses merging with a set of previous local changes (e.g. variant A, variant B, deltaA, deltaB - Fig. 10-16 – Note: changes on delta or variant of a check-out copies are equivalent to merging of previous local changes).

**As per claim 36**, Leblang discloses getting the build-specific changes from a build area (e.g. Fig. 7, 10-12); and merging the build-specific changes into the enlistment files (e.g. col. 26, line 59 to col. 27, line 58; Fig. 19; *view: alpha* – Fig. 22).



Art Unit: 2124

**As per claim 37**, Leblang discloses selecting a particular build from which to get the changes (e.g. col. 1, line 60 to col. 2, line 29; Fig. 23; *build script* – col. 28, line 62 to col. 29, line 48 – Note: a specific build correspond to a script generated by the developer, and this is equivalent to defining a build specific to generating a script therefor).

**As per claim 38**, this is a computer medium version of claim 22 with the medium limitation being disclosed by Leblang (e.g. workstation 104 – Fig. 2, 7).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopwood et al., USPN: 6,223,343 (hereinafter Hopwood), in view of Skinner, USPN: 5,481,722 (hereinafter Skinner).

**As per claim 1**, Hopwood discloses a method for developing software having multiple versioned documents, comprising:

comparing multiple ones of the versioned elements of a project at different subdivision level ( e.g. *merge elements 16* – Fig. 12; Fig. 15-20; Fig. 8, 11; col. 14, lines 32-36; col. 18, lines 23-46; *merge* -col. 19, lines 36-47 – Note: management of change to level of logical group elements to record changes using merge tool is equivalent to comparing versioned) and indicating the changes on elements of workgroups at each subdivision level ( e.g. *record of ... changes* - col. 19, line 47 to col. 20, line 10; Fig. 15);

Art Unit: 2124

unmerging from a later version of versioned documents of changes previous to a further set of changes (e.g. *regression, restore, revert* – col. 28, lines 45-55 );

associating with the set of changes in versioned documents a plurality of non-versioned documents pertaining respectively to versions of versioned documents (e.g. *issuance control data, maintenance libraries, audit trails, issuance reports, metadata* - col. 13, line 63 to col. 14, line 14; *difference reports* - col. 19, lines 36-40 – Note: each element retrieved for work group build is equivalent to versioned document); updating by copying files from a common storage area to a private enlistment area, adding build-specific changes to enlistment copies, making changes to the modified copies (e.g. col. 19, lines 36-63; Fig. 3; *host developer workstation* - col. 17, line 50 to col. 18, line 39; *workstation 96* – Fig. 7 ) and thereafter removing the changes and returning the files to the common area (e.g. *master copy* - col. 18, lines 40-52 – Note: master copy is equivalent to storing/keeping of copies without added changes back into the repository).

But Hopwood does not specify comparing of versioned documents to a common parent document and indicating conflicts caused by alternative histories from the parent document. Hopwood teaches merging and validating of software element with interaction with a repository ( e.g. col. 15, lines 14-26; Fig. 8) which suggests a level of conflict resolving with changes incurred life cycle. Skinner, in a method to compare/merge files in a hierarchy of development environments similar to built environment workgroups levels as taught by Hopwood, discloses comparing multiple versioned child documents or deltas to a parent document and recording conflicts (e.g. *input and output tables* - Fig. 7a-b; Fig.8 – Note: *branch deltas* are equivalent to identifying conflicts between offspring versions and ancestor versions via alternative histories). It would have been obvious for one of ordinary skill in the art at the time the invention was made

Art Unit: 2124

to add to Hopwood's method of merging software elements and auditing changes to child-parent comparison technique as taught by Skinner, in case Hopwood's merge method does not already include one, because this would enable the synchronizing child version from its ancestor version with incremental difference extracting and identification of conflicts by means of tree-like branching, thus enabling better reconciliation of hierarchical versioned documents.

Nor does Hopwood explicitly specify comparing versioned documents at a plurality of different subdivision levels. In view of the teachings by Hopwood to effect merge at different levels of project subdivisions, and the teaching by Skinner as mentioned in the rejection of claim 3, it would have been obvious for one of ordinary skill in the art at the time the invention was made to add to the merge process associating changes to levels of workgroups documents within a project hierarchy as proposed by Hopwood, the method of tracking changes imparted to a subdivision level within a document as suggested by Skinner from above. The tracking of changes being applied to a line-by-line level in version control and merging processes was a well-known concept in the art at the time the invention was made; and the motivation to combine Hopwood and Skinner to enhance this process of merging as taught by Hopwood would be to help effecting such merging and document changes tracking the way it has been used by well-known concepts to assure thorough tracking of documents differences to the smallest level granularity.

**As per claim 2**, this is a computer-readable medium version of claim 1. As for a medium to support the software product, Hopwood discloses use of workstations to develop the software building (e.g. Fig. 7) hence implicitly discloses the use of computer-readable medium.

Art Unit: 2124

8. Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner, USPN: 5,481,722, in view of Hopwood et al., USPN: 6,223,343.

**As per claim 16**, Skinner discloses a method useful in developing software having multiple versioned documents, comprising:

receiving first, second, and third version levels, where the third version incorporates 2<sup>nd</sup> set of changes from a second version, and the second version incorporates 1<sup>st</sup> set of changes from the first version level (e.g. Fig. 8 – Note: C2 include revision levels of P and P inherit levels of GP);

outputting of merged documents (e.g. Fig. 5).

But Skinner does not disclose unmerging the 1<sup>st</sup> set of changes from a third version level, while preserving the 2<sup>nd</sup> set of changes. Given the tree lay-out of changes level associated with first, second, third level of versioned documents by Skinner (Fig. 8), it is noted that the possibility for reconciling or removing of set of changes as incorporated in each level as shown is implicitly suggested. Further, Hopwood, in a method to manage elements in workgroup for building a project with multi-level versioned objects ( Fig. 11-20) using the merge method analogous to that of Skinner, disclose the possibility to unmerge a version to restore a previous version (e.g. e.g. *regression, restore, revert* – col. 28, lines 45-55). It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the unmerging of selected set of changes/versioned levels as taught by Hopwood and apply it to the child/parent lay-out suggested by Skinner, because the fact of reverting or retrogress to an earlier set of changes independently of the level in the hierarchy is very helpful in promoting earlier proven

Art Unit: 2124

versions that would be fit for release and un-promoting versions unfit for release or that appear to have bugs and needed further re-adjustment.

**As per claim 17**, this claim is another obvious variation of claim 16 unmerge limitation, hence would be rejected here with the same rationale as set forth therein because once the unmerge is applied to one lower level of the tree, it can be applied higher in the tree or lower in the tree.

**As per claim 18**, Skinner discloses a developer receiving versioned objects for modification and revision checking hence has implicitly disclosed receiving indications of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> version levels ( e.g. col. 2, lines 31 to col. 3, line 13; *build table*, *build list* - Fig. 5).

**As per claim 19**, this is a computer-readable medium version of claim 16. As for a medium to support the software product, Skinner ( Fig. 3) discloses use of workstations to develop the software building, hence implicitly discloses the use of computer-readable medium.

**As per claims 20 and 21**, these claims correspond to or are slight variations of the selective unmerge limitation of claim 16, hence are rejected herein using the same rationale as set forth therein.

9. Claims 13-14 are rejected under 35 USC 103(a) as being unpatentable over Skinner, USPN: 5,481,722, as applied to claim 11, in view of Howard, USPN: 5,600,834 ( hereinafter Howard).

**As per claims 13 and 14**, Skinner discloses using array structures to store matching input data between file to compare in the merge and reconcile technique ( Fig. 5) with indication a possible or conflicts due to alternative histories of child documents but fails to disclose marking of possible conflicts ( re claim 13) or actual conflicts ( re claim 14) in the merged document.

Art Unit: 2124

Howard, in a method to reconcile versions of a file with generation of a merge document analogous to the combined delta structure file by Skinner, disclose a document combining the results from reconciling documents with history of more than one versions (e.g. Fig. 4; col.6, lines 35-48) and marking in this document of possible conflicts due to histories of child/parent documents (e.g. col. 12, lines 11-12). It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide such information marking as suggested by Howard within the combined delta file as taught by Skinner because it would provide additional information for the developer or version administrator to further effect verification or error-proofing on the combined merge output file prior to committing it to persistent storage or distribution to sites as suggested by Howard.

10. Claims 28, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leblang et al., USPN: 5,649,200.

**As per claim 28**, Leblang does not specify including in the association file a design documentation; but Leblang discloses non-versioned documents (e.g. config spec 230 – Fig. 24; build script, header file, operating system in 532 – Fig. 12) such that incorporating specs, operating system, header files and build/shell script is equivalent to including data for documenting the overall environment designed to execute the compiled object. Official notice is taken that documenting design, test and operating environment in a project configuration system was a well-known concept in the art. Hence, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include design documentation in the association file along with system configuration in order to associate versioned objects as taught

Art Unit: 2124

by Leblang with the specified design settings under which such objects has been developed to become an executable and deliverable element in the configured build.

**As per claim 30**, Leblang does not disclose including screen shots in the non-versioned documents although Leblang discloses screen views for resolving version conflict or bugs (e.g. col. 9, line 43 to col. 10, line 37). Official notice is taken that the use of screen captures to take snap shots at error display during a debug or for report on a software execution fault was a well-known practice. Hence, Hence, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include in the association file ( *configuration record*) as suggested by Leblang any debug information, e.g. including screen shots as taught by known practices because this would provide graphical evidence for the developer to better address conflicts or bugs thereby ensure quality in delivering versioned elements for the build.

#### ***Response to Arguments***

11. Applicant's arguments filed 12 /16/2003 have been fully considered but they are not persuasive. Following are the reasons therefor.

As per rejections under 35 USC 102(b):

(A) **As per claim 3**, applicants argued that Skinner does not teach nested subdivisions and that the parts that were cited by Examiner happens to be three instances of a single line type subdivision (Appl. Rmrks, pg. 3, last para). First, Examiner notes that the portions being cited describe a way to start and end marking a section of a source module to which some delta are to be applied; hence such control lines are marking some subdivisions nested in the whole source document for which subsections are marked for denoting the comparisons or deltas being applied thereto. It is the section being marked that is to be understood as being the nested subdivision of

Art Unit: 2124

one type. Second, the characters or line-by-line can be understood as a second nested subdivision type. As a whole, the control lines demarcating the nested subsections and the text characters within each line of such sections read on what is recited as first type of nested subdivision and second type of nested divisions, respectively.

(B) Applicants further submitted that Skinner reference that the children are compared with successive and different versions of the parent, and that revision of parent is not clearly a common parent (Appl. Rmrks, pg. 4, 3<sup>rd</sup> para ). Examiner likes to point out that from what is shown from Skinner, there is a common parent from which children are referred to in order to generate additional version organized in set of files from the process of reconciling with a parent file. Second, skinner discloses reconciling and comparing to generate deltas (i.e. generating difference: comparing ). As such, the limitation ‘comparing both child components’ has been disclosed and the way it is shown in the Figure 6, such comparing is applied between descendant components in a context involving a common parent component. The claim does not specify that the action of comparing of children is to be effected in a given direction or scheme, e.g. child-against-child or child-against-parent, children simultaneously against one parent. Therefore, ‘comparing both children documents with the common parent document’ amounts to what is disclosed by Skinner, as explained above.

(C) **As per claim 22**, Applicants have submitted that Carrier does not teach or suggest ‘retrieving both versioned and ... as a single unit’ (Appl. Rmrks, pg. 5, 1<sup>st</sup> para ). The parts shown ( Fig. 6) in the rejection shows a common unit operating so to help develop a build to be loaded by the configuration administration machine. The components to be enlisted for the build are the environment builder associated with a developer work station, such enlisting system



Art Unit: 2124

including items loader, a database and a tracker. And the files to be included are not only versioned source files but also check-in info data, among others, all of which encompass versioned and non-versioned documents. The single unit here is the build being loaded into the builder environment administered by a local site machine, the fact that a build is to be loaded implicitly denotes that files being loaded cannot be belonging to more units than the one targeted for a build. Hence, the cited references read on the claim.

(D) **As per claim 27**, Applicants have argued that Leblang's configuration record does not cause incorporation of elements into a build; or does not teach designate document versioned and non-versioned documents as required (Appl. Rmrks, pg. 5, last para; pg. 6, 1<sup>st</sup> para). The rejection has pointed out that a file comprises entries, each designating a version objects (e.g. *derived objects*), and some designating non-versioned files (e.g. *foo.c*). Hence, the rejection reads on what is claimed. Applicants' arguments about records or audits that do not incorporate elements in the build at the moment of the build have no bearings on what has been claimed. As argued, the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., incorporate in the build) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(E) **As per claim 31**, Applicants have submitted that "Examiner fails to state where 'build specific changes ... removing build specific changes'" (Appl. Rmrks, pg. 6, 2<sup>nd</sup> para). The rejection shows the process of synchronizing children objects from common ancestor; and further cited the check-in/check-out teachings in an environment that new changes can be

Art Unit: 2124

imparted to checked out files. Since the overall scheme by Leblang's method is the providing of a build based on a configuration file, the intermediate steps of synchronizing files would end up in making specific changes for the target build as taught in fig. 20-24; hence checking out files for incorporating changes and synchronizing deltas and taking those changed files back into the repository as suggested by Leblang do read on making local changes to files, and removing them from the area when the changes have been effected. Hence, Leblang discloses enlisting files for applying changes in a work area and removing them therefrom in the very concept of check-in/check-out, such changes being applied to files being approved to go into the specific build, i.e. build specific changes.

As per rejections under 35 USC 103(a):

(F) **As per claim 1**, Applicants argued that Hopwood does not have subdivisions to compare within a document (Appl. Rmrks, pg. 7, 2<sup>nd</sup> para ). The rejection points out how tracking changes among different workgroup at different level suggests comparing versioned elements at different subdivision levels. Hopwood organizes a inventory/project documents into hierarchy of records as well as workgroups, thus implicitly discloses a level of subdivisions and tracking of changes associated with a merge process, with indication of a level of changes imparted to a subdivision of a project. Besides, the claim does not specify subdivisions of document being a line or a character. But for the sake of argument, even if Hopwood does not teach comparing at levels of subdivisions of each document in the workgroup/project, the fact Skinner teaches such subdivisions for tracking deltas output would have made the combination of Skinner and Hopwood obvious. And the rejection has addressed such combination in the light that

Art Unit: 2124

comparing documents for change tracking and merging was a well-known concept, a concept being evidenced therein by the teachings by Skinner.

(F) Applicants have disagreed that Hopwood teaches ‘unmerging’, i.e. this requires “unmerging being applied to a previous entire set of changes even if ... by future changes” (Appl. Rmrks, pg. 7, 3<sup>rd</sup> para ). The claim only recites ‘a set of changes previous to a further set of changes’. As interpreted, this only amounts to changes that would be prior to a possible set of changes being made later; and as used in the rejection, the reverting by Hopwood reads on what is claimed. The rejection cannot address features that are not claimed.

(G) Applicants have raised the issue about Hopwood not teaching or suggesting ‘adding a set of build specific to files in an enlistment area... local changes to the enlistment files’ (Appl. Rmrks, pg. 7, bottom; pg. 8, top). The project and version, workgroup manager as disclosed by Hopwood is analogous to the build loader unit by Leblang with the version management including check-in/check-out. Hence the rationale as used in section E is herein re-applied.

(H) For arguments on claims 11, 16-21, 13-14, 28-30, refer to corresponding counter-arguments as set forth above.

The claims will stand rejected in view of the above observations.

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2124

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (703)305-7207. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9306 ( for formal communications intended for entry)

**or:** (703) 746-8734 ( for informal or draft communications, please consult Examiner before using this number)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. , 22202. 4<sup>th</sup> Floor( Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

VAT  
February 10, 2004

*Kakali Chaki*

**KAKALI CHAKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**

## Interview Summary

Application No.

09/717,676

Applicant(s)

BARTZ ET AL.

Examiner

Tuan A Vu

Art Unit

2124

All participants (applicant, applicant's representative, PTO personnel):

(1) Tuan A Vu. (3) \_\_\_\_\_.

(2) Jackie Conkey ( Rocci, Stevens). (4) \_\_\_\_\_.

Date of Interview: 14 August 2003.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: N/A.

Identification of prior art discussed: \_\_\_\_\_.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant noticed a typo mistake in number of pending claims listed in the office action and inquired for clarification. By this supplemental action, Examiner agrees to fix the error and provide a adjusted number of claims via form 326 and ask the Applicant to view the office action in accordance to the correction provided in the form. The office action still addresses the correct number of claims; only a typo error needs to be corrected.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
Examiner's signature, if required